**Tribhuvan university**

**Institute of science and technology**

**IMAGE PROCESSING**

**2076**

Third Year / Fifth Semester / Science **Full Marks**: 30

**Computer Science and Information Technology (CSC.321)** **Pass Marks**:12

*Candidates are required to give their answers in their own words as far as practicable. The questions are of equal value.*

**Attempt ALL questions. [7\*3=21]**

1. Define image and image processing. Explain the various steps involved in image processing.
2. Explain smoothing image and its techniques.
3. How Fourier transformation and inverse Fourier transformation help in digital image processing.

**Attempt any THREE questions** [3\*3=9]

1. Define convolution.
2. Differentiate between high pass and low pass filter.
3. What is image Magnification.
4. Define ideal and Butterworth filter.